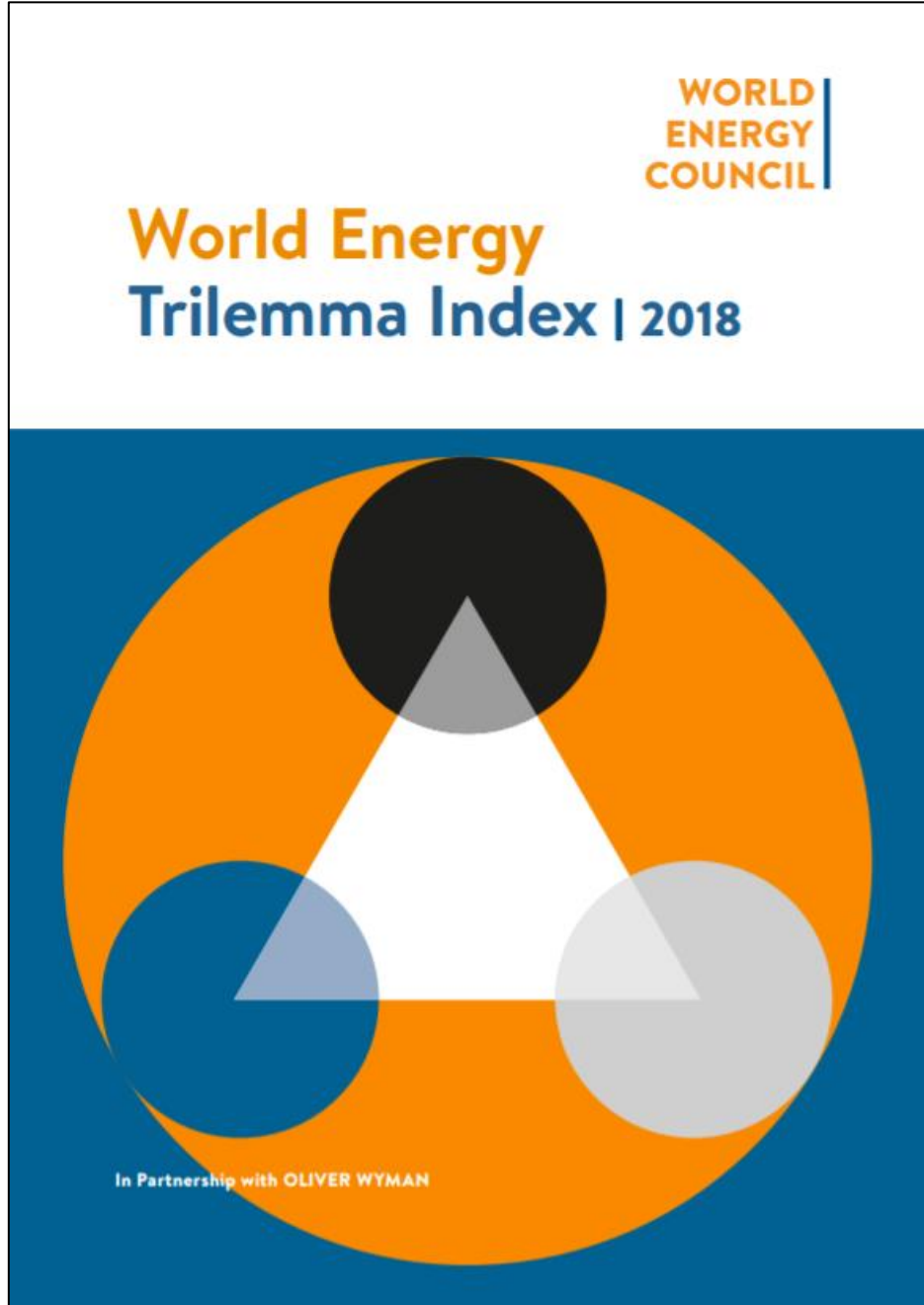


WORLD ENERGY TRILEMMA INDEX 2018 GENEL SONUÇLAR VE TÜRKİYE'NİN DURUMU

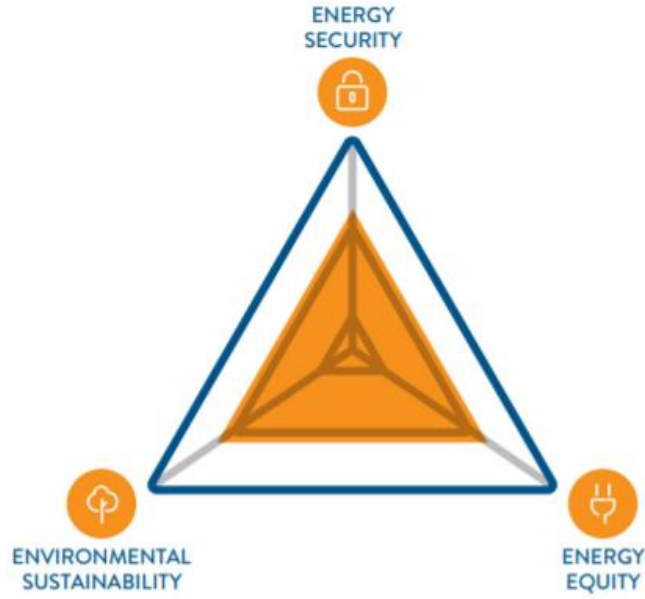


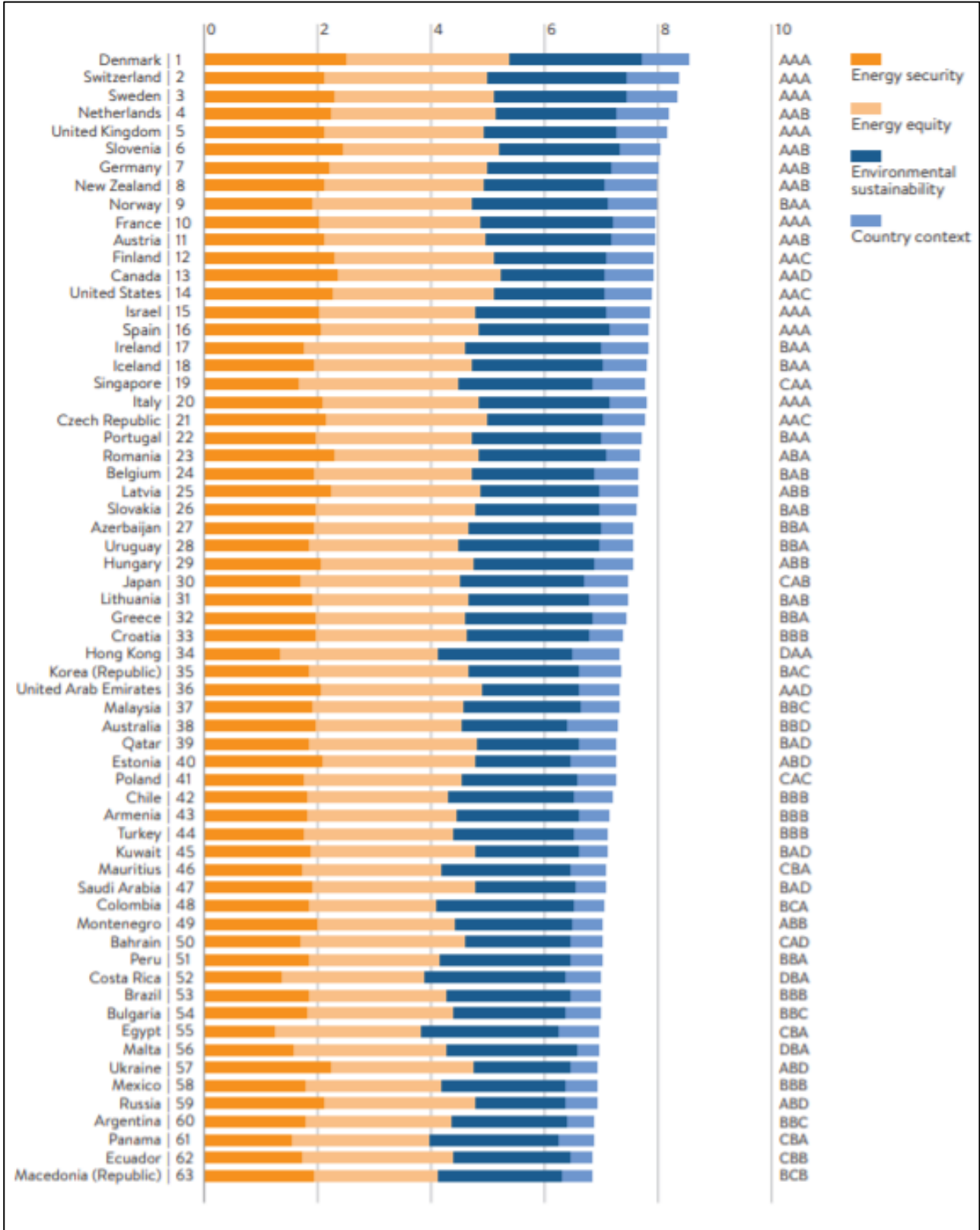
World Energy Trilemma Index 2018 Raporu'nda 125 ülkenin verileri kullanılarak hazırlanan genel ve Türkiye özelindeki sonuçlar ile bazı konularda değinilmiş olan Türkiye örnekleri aşağıda verilmiştir.

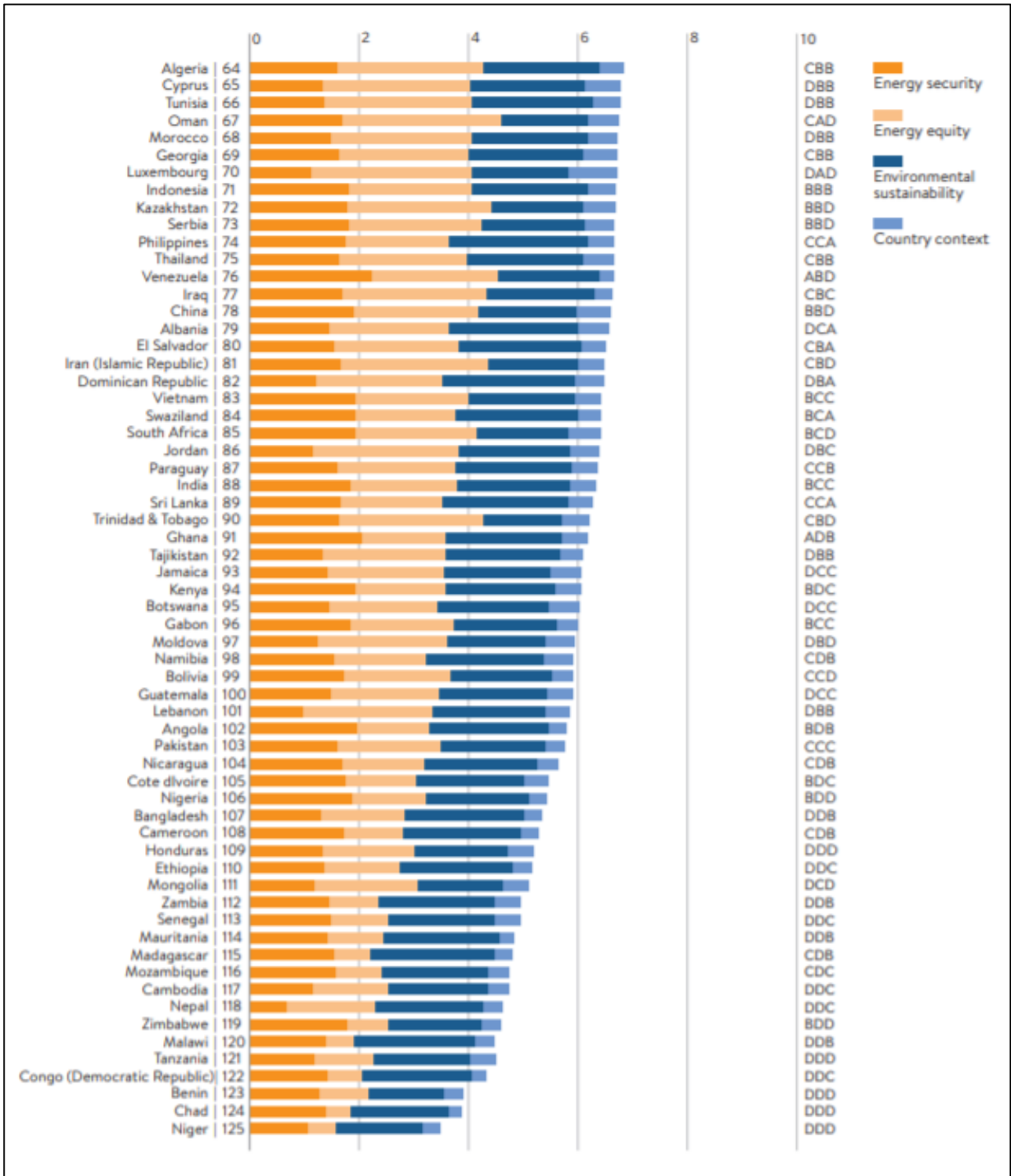
Figure 1: 2018 World Energy Trilemma top 10 performers overall and per dimension

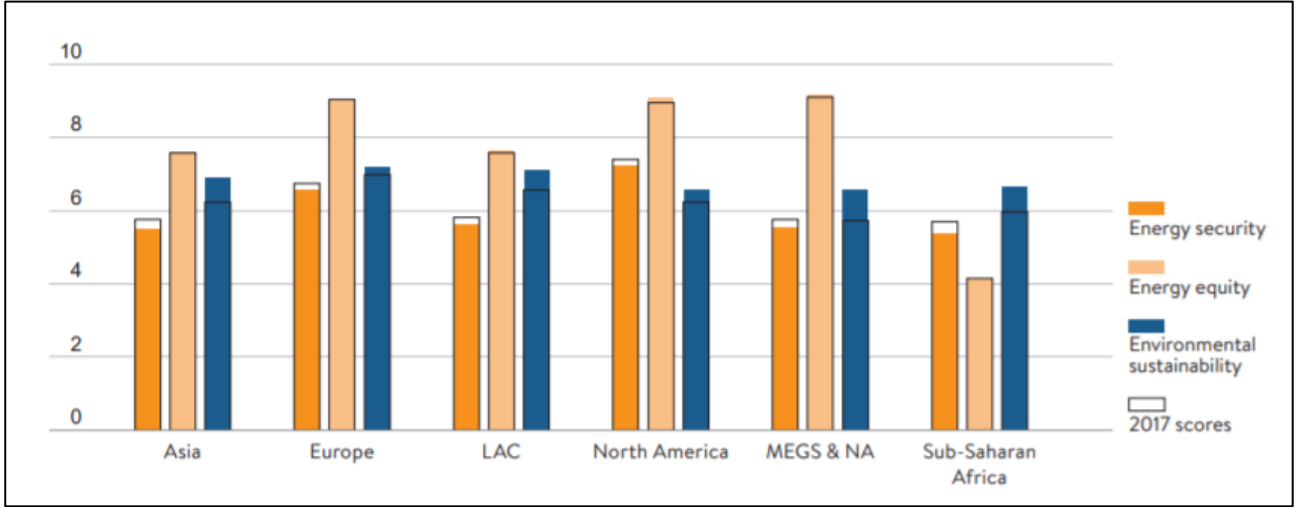
**TOP 10
OVERALL RESULTS**

1. Denmark
2. Switzerland
3. Sweden
4. Netherlands
5. United Kingdom
6. Slovenia
7. Germany
8. New Zealand
9. Norway
10. France









A drought caused Turkey's hydropower production to fall in 2014. As a result, the increased use of fossil fuels in the electric grid was captured by a subsequent decline in electricity diversification score.

Figure 12: Turkey Electricity Generation 2013-2015

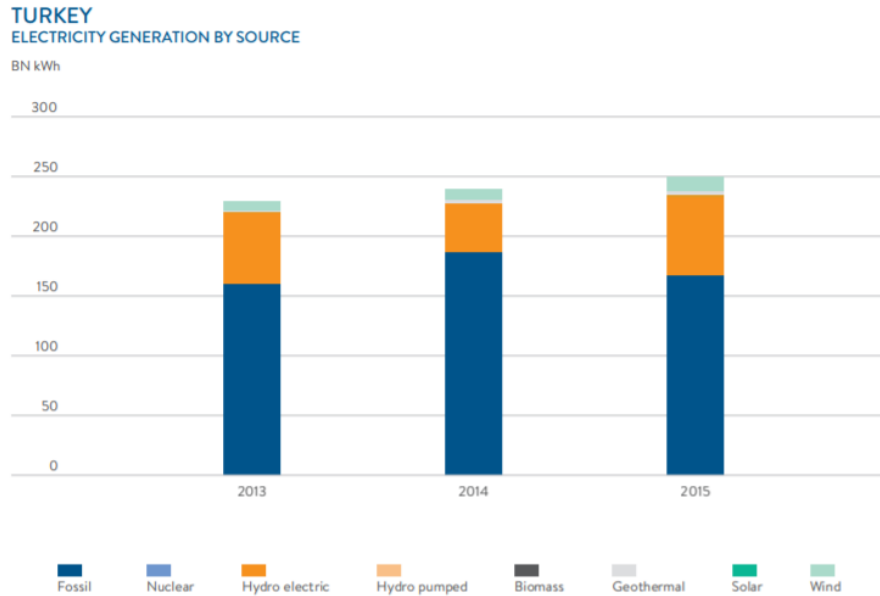
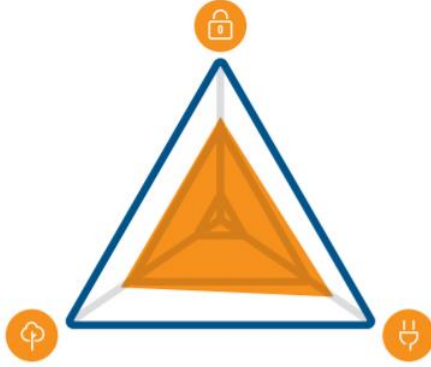


Figure 19: Energy Security Issues Comparison: France and Turkey



Figure 22: Europe region Trilemma balance



EUROPEAN COUNTRIES

Denmark (1)	Italy (20)	Turkey (44)
Switzerland (2)	Czech Rep. (21)	Montenegro (49)
Sweden (3)	Portugal (22)	Bulgaria (54)
Netherlands (4)	Romania (23)	Malta (56)
United Kingdom (5)	Belgium (24)	Ukraine (57)
Slovenia (6)	Latvia (25)	Russia (59)
Germany (7)	Slovakia (26)	Macedonia (Rep.) (63)
Norway (9)	Hungary (29)	Cyprus (65)
France (10)	Lithuania (31)	Georgia (69)
Austria (11)	Greece (32)	Luxembourg (70)
Finland (12)	Croatia (33)	Serbia (73)
Spain (16)	Estonia (40)	Albania (79)
Ireland (17)	Poland (41)	Moldova (97)
Iceland (18)	Armenia (43)	

TURKEY

TRILEMMA INDEX RANKINGS AND BALANCE SCORE



TRENDS AND OUTLOOK

- Turkey climbs 6 places to rank 44 this year. Good scores are achieved in the energy equity and environmental sustainability dimensions. The energy security score has improved relative to other countries and as part of the measure of supply diversity. The improved balance score is BBB.
- Turkey must accommodate a fast-growing demand for energy. Enormous investment volumes are required to meet the country's continuing growth. Currently, 27% of primary energy consumption and 50% of power generation – a record high – is met by domestic resources. In addition, 33% of overall power generated in Turkey is from renewable resources.
- Numerous initiatives are underway to improve energy security in the country: 1) Two competitive tenders of 1000 MW for each of solar and onshore wind was completed in 2017. Turkey has announced a first of its kind tender to be held in 2018 for offshore wind, targeting 1200 MW of installed capacity; 2) An additional 8222 MW of capacity was added in 2017, almost 70% of which is from renewable resources, mainly solar and wind. Tender allocations of 3000 MW wind capacity were completed in 2017 by the National Transmission System Operator; 3) An estimated 300 MW of new geothermal power capacity came online in 2017. This puts Turkey in 2nd place in terms of net additional installed capacity in 2017; 4) Turkey has firm plans for adding nuclear power to its energy mix. Construction license of the Mersin Akkuyu nuclear power plant is granted by the regulator and is scheduled to become operational by 2023. A new agency has been established in Turkey to regulate the nuclear energy sector; 5) The most important part of Southern Gas Corridor, the Trans-Anatolian Natural Gas Pipeline (TANAP), has become operational in June 2018. Export to Europe is expected in 2020 once the construction of the Trans Adriatic Pipeline (TAP) is completed; 6) TurkStream Natural Gas Pipeline is expected to become operational by the end of 2019.

KEY METRICS

Industrial sector (% of GDP)	31.67	GDP per capita, PPP US\$ (GDP Group)	25,247 (10)
Energy intensity (koe per US\$)	0.08	Diversity of international energy suppliers	High (HHI = 1,302)
Population with access to electricity (%)	100	Access to clean cooking (%)	96
Household electricity prices (US\$/kWh)	0.15	Rate of transmission and distribution losses (%)	13.76
CO ₂ intensity (kCO ₂ per US\$)	0.30	GHG emission growth rate 2010 - 2014 (%)	3.16

ENERGY PROFILE

Fossil fuel reserves: 7,947 Mtoe

Total primary energy supply composition

Diversity of electricity generation

